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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,325	03/18/2004	Stephen R. Carsello	7463-40 'CE12004JDP	5567

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AKERMAN SENTERFITT
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EXAMINER

WANG, TED M

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/803,325

Applicant(s)

CARSELLO ET AL.

Examiner

Ted M. Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-26 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,11-14 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 3,5,6,8-10 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4, 7, 13, 14 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanterakis et al. (US 2003/0223476).

- With regard claim 1, Kanterakis, cited by Applicant, discloses a Collision detection circuit generating a set of known preamble waveforms, wherein at least one preamble waveform is distinguishable from a remaining set of preamble waveforms among the set of known preamble waveforms (Fig.4 elements 452, 453, and paragraphs 49, 61, and 62); and
transmitting at least one distinguishable preamble waveform among the set of known preamble waveforms based on an association with a call type and a receiver identifier (Fig.8A-8B, Fig.9A-9B, and paragraphs 61)
- With regard claim 4, Kanterakis further discloses the step in a receiver of calculating a correlation between a received signal and an undistorted version

of a transmitted preamble waveform, for every known preamble waveform within the set (paragraphs 40-43, 67, and 74-75).

- With regard claim 7, Kanterakis further discloses wherein the method further comprises the step of computing a measure of envelope variation for a received envelope (Fig.4 element 415, where the matched filter output is the maximum peak or envelope).
- With regard claim 13, which is a system claim related to claim 1, all limitation is contained in claim 1. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 14, which is a system claim related to claim 2, all limitation is contained in claim 2. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 16, which is a system claim related to claim 4, all limitation is contained in claim 4. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 17, Kanterakis further discloses wherein the transmitter apparatus transmits at least one among the set of preamble waveforms on a plurality of predetermined carrier frequencies (Fig.6 elements $P_0 - P_3$ and paragraph 47).
- With regard claim 18, Kanterakis discloses a wireless transmitter comprising:
 - a signal generator for generating a set of known preamble waveforms (Fig.4 element 452);

a signal source (Fig.4 element 453) that alters at least one of the preamble waveforms in the set of preamble waveforms to provide a distinguishable preamble waveform from a remaining set of preamble waveforms (Fig.4 element 451 and paragraphs 47 and 49); and

a transmitter apparatus (Fig.4 elements 422-430) coupled and responsive to the signal source (Fig.4 element 453) to transmit at least one among the set of preamble waveforms made distinguishable based on an association with a call type and a target identifier (Fig.8A-8B, Fig.9A-9B, and paragraphs 61).

3. Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by Gamble et al. (US 2004/0190652).

- With regard claim 11, Gamble et al. discloses a method of reducing collisions in an asynchronous communication system, comprising the steps of:

receiving at least one preamble waveform among a set of different preamble waveforms (paragraphs 24 and 25) which toggle between two symbol frequencies (paragraph 25), the different preamble waveforms being distinguishable by at least having one among a different symbol frequency spacing and a different symbol toggling duty cycle (Fig.3 and paragraph 32); and

selecting to decode (Fig.1 elements 238, 240 and 248 and paragraph 25) a preamble waveform among the set of different preamble waveforms based on at least one among the different symbol frequency

spacing and the different symbol toggling duty cycle (Fig.3 and paragraphs 24, 25 and 32).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanterakis (US 2003/0223476) in view of Busching et al. (US 5,778,073).

- With regard claim 2, Kanterakis discloses all subject matter as described in the above paragraph except for specifically teaching the step of forming a set of known, periodic, preamble waveforms using continuous-phase frequency-shift keying, modulated such that the signals toggle between two frequencies.

However, Busching et al., cited by Applicant, teaches the step of forming a set of known, periodic, preamble waveforms using continuous-phase frequency-shift keying, modulated such that the signals toggle between two frequencies (column 10 lines 43-65).

It is desired to include the step of forming a set of known, periodic, preamble waveforms using continuous-phase frequency-shift keying, modulated such that the signals toggle between two frequencies in

order to reduce noise and bit error rate. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the method as taught by Busching et al. in which, having the step of forming a set of known, periodic, preamble waveforms using continuous-phase frequency-shift keying, modulated such that the signals toggle between two frequencies, so as to reduce noise and bit error rate.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gamble et al. (US 2004/0190652) in view of Chung et al. (US 6,359,871).

- With regard claim 12, Gamble et al. discloses all subject matter as described in the above paragraph except for specifically teaching wherein the method further comprises the step of basing a desired preamble waveform on a receiver's call types and identifiers associated with each of the receiver's call types that are available.

However, Chung et al. teaches wherein the method further comprises the step of basing a desired preamble waveform on a receiver's call types and identifiers associated with each of the receiver's call types that are available (column 9 lines 14-49 and column 11 lines 5-31) in order to operational efficiency and flexibility as well as reducing the cost (column 2 lines 29-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to Therefore, It would have been obvious to one of ordinary skill in the art at the time of the

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invention was made to include the method as taught by Chung et al. in which, wherein the method further comprises the step of basing a desired preamble waveform on a receiver's call types and identifiers associated with each of the receiver's call types that are available) in order to operational efficiency and flexibility as well as reducing the cost.

Allowable Subject Matter

7. Claims 19-26 are allowed.
8. Claims 3, 5, 6, 8-10 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is 571-272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ted M. Wang', with a stylized, cursive script.

Ted M. Wang

Ted M Wang
Examiner
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